

Instruction Manual

USER GUIDE PROTOCOL

CDA SPRAYER C/W FLOAT, 10L TANK AND BATTERY CASE.

ABOUT CDA SPRAYER

An electric sprayer that allows the fulfillment of optimal treatments with capacity of 10 litres.

This sprayer is manufactured in durable and impact resistant material. It is chemical resistant an UV stabilized.

The sprayer has been designed using the very latest technology to give longevity and reliability.

The battery is rechargeable 6 volt 3 Ah S.L.A unit (Sealed Lead-Acid).

The power requirement of the motor is only 0.10A.

The charger is able to complete battery recharge in 8 hrs.

Test has shown that the drop in voltage and current is insignificant to cause he drop in motor speed even after continuous use of over, as such giving a consistent spray distribution.

Benefits:

Reduction of waste.

Improved safety for the operator.

Reduction of the environmental risks.

Chemical saving.

Reduction of spraying time.

Reduction of application costs.

AN EFFECTIVE PRODUCT IS NOT ENOUGH.
THE PRODUCT ITSELF MUST BE CORRECTLY APPLIED.

PROTECTIVE CLOTHING

When applying herbicides with the CDA sprayer the following items MUST be worn:-

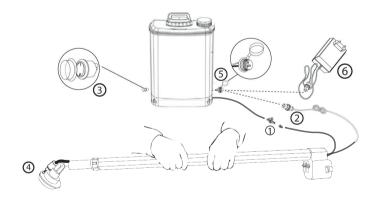
- Rubber gloves and boots
- · Long Sleeve shirt.
- Long Trousers.
- Eye goggles.

It is also recommended to wear:-

• Disposable coverall OR an apron.

PREPARING FOR SPRAYING

The sprayer is delivered in a collapsed form. To assemble ready for spraying:



- 1) Extend the sprayer and securely connect the feed tube (1) to the flow valve.
- 2) Connect the male 3 pole connector ② from the lance to the tank female 3 pole connector ⑤ and lock the both connector.
- 3) Remove the atomiser protective cover (4) and check by hand that the atomiser disc spins freely.
- 4) Turn on the switch (3).

STEP-BY STEP FAULT FINDING PROCEDURE

Motor Not Functioning

- 1) Battery terminal is not inline with the sprayer's terminal.
- 2) Faulty battery or carbon formed on the terminals.
- 3) Loose connection of battery or switch terminal.
- 4) System short circuit.
- 5) Electric motor of the pump has decayed.
- 6) Charging was done correctly.

 Switch ③ should be in ON position when charging, 3 pole connector is connected properly.

Motor Functioning But Not Spraying As Desired

- 1) Nozzle is blocked.
- 2) Disc is blocked.
- 3) Hose is blocked.(Rane cases)
- 4) Motor has worn out.

Tank Is Leaking At The Side

- 1) Valve (STMC-021-10045) is broken.
- 2) Washer (STTK-012-10019) has worn out or missing.
- 3) Hose clip is loose or broken.

METHODS OF USE

For more detailed information on preparation and use of sprayers refer to the manual supplied with the CDA sprayer.

Pre-mix the herbicide product in the required volume of water in the 10 litre backpack (see section below on mixing and calibration) and attach the backpack to the sprayer.

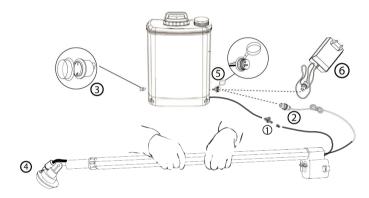
Hold the sprayer at an angle of between 30° - 40° to the ground with the atomiser head positioned about 20cm above the weed. Soil age or soil surface. In this position the atomiser head should be angle slightly forward to spray away from operator. N.B. make sure the spray head is more that 60cm away from the operator avoid contamination.

MAINTENANCE AFTER USAGE

The sprayer must be decontaminated inside and out with mild solution of detergent, followed by complete FLUSHING with clean water and run pump to clean the systems as well.

- Do not attempt to flush into base compartment and hand lance, if necessary just wipe them with a DAMP CLOTH.
- · Remove nozzle and filters for individual cleaning.
- Store separately if the sprayer is not going to be used for several days.
- Nozzle need to be replaced every 6 months based on usage and filters to be replaced when necessary.

RECHARGING THE BATTERY



- i. Connect the battery charger male **(6)** 3-pole connector to the tank female 3-pole connector **(5)** and lock the both connectors.
- ii. The tank's switch (3) should be in ON position.
- iii. Connect the battery charger plug to the main electric power and switch on. The Red static 'in charging' and the green static 'done charging' indicator will glow. The battery will need to recharge for 8 hours.
- iv. After done with charging, remove the battery charger (6) from the main electric power and disconnect the 3-pole connector.

PROLONGED INACTIVITY

- If the CDA sprayer will not be use for a long time remove the battery and store it in a cool and dry place.
- · Recharge battery every 3 months.

GENERAL PRECAUTIONS

- Do not switch the sprayer on with disc cover not removed, this may damage the serrated disc.
- Fill the tank only through the tank filter in order to avoid blockage of the nozzles.
 (Avoid spillage)
- NEVER USE CLASS ONE PRODUCTS WITH CDA SPRAYERS.
- · Use only clean water without impurities.
- · Do not start spraying without fixing the tank cap firmly.
- Distribute the chemical evenly, keeping the nozzle at an adequate distance from the surface to be treated.

INSTRUCTION BEFORE USAGE

- Make sure that GREEN DIODE lights up with static (this occurs when the battery is fully charged and switched to trickle charge).
- Check the FILTER and NOZZLE to make sure it is free from any blockage or sediments.
- Make sure that all FILTERS, O-RING and NOZZLE is in place correctly and sufficiently tight to avoid leakage.
- Always pour liquid into the tank through tank filter and avoid spillage on backrest.
- · Make sure tank cap is close properly.
- · Adjust straps to suit individual sprayer operators.
- Wipe offany spillage on the tank surface.

IN FIELD USAGE

- Never drag the sprayer on the ground or on weeds while transporting and when reloading the liquid.
- Avoid the disc hitting the ground or weeds while spraying, this could also cause blockage to the nozzle and disc.
- An adequate distance to be kept from the surface to be treated.(20cm)

- * Switch on the atomiser disc and then open the flow tap. Liquid should be seen flowing down the hose pipe to the atomiser head.
- * With the lance held preferably to the side of the operator walk at a moderate pace (around 54 meters in one minute). This will treat a 1.2m wide strip and will cover an area of 65 meter square each minute.
- * When spraying has finished close the flow tap and then switch off the atomiser. Raise the spray head up to an angle of 45 ° (with the spray head uppermost) and then open the tap flow valve to allow any remaining liquid in the hose pipe to flow back to the tank. Close the tap flow valve.
- * For ease of transport the tank can be disconnected (use the flow valve to isolate any liquid left in a backpack) and the sprayer collapsed (OFF the switch and disconnect the 3 pole connector).

MIXING AND CALIBRATION

With the CDA sprayer, herbicides are usually applied in around 25 litres of water per hectare.

To prepare the spray mix, select the rate of product to be applied per hectare then add sufficient water to make up to the total application volume required.

Example: for one hectare

Glyphosate rate - 3 litres

Add water - + 7 litres

Total volume - 10 litres

Note:

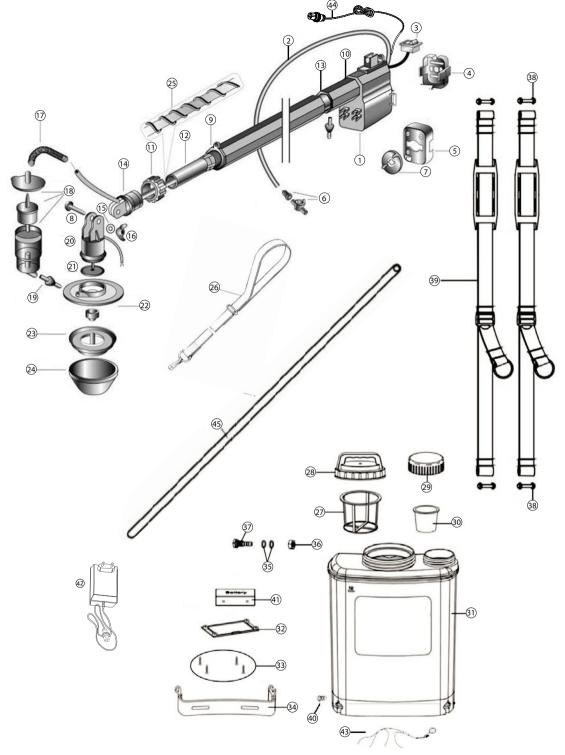
When applying herbicide products ALWAYS follow the label recommendations.

The following table can be used to select the correct feed nozzle: Appendix 1

Total Spray	Swath Width	Feed	Flow Rate	Walking Speed
Volume	(M)	Nozzle	(ml / min)	(m / sec)
25	1.2	3	166	0.9

- * Some products when mixed in water can be slightly viscous and the actual flow rate through each nozzle may be necessary to use a larger feed nozzle.
- * Sprayer calibration should be checked regularity by measuring the actual flow rate. This is done by removing the feed nozzle from the spray head and measuring the amount of spray liquid in a measuring cylinder over a period of 1 minute. When measuring the flow rate hold the sprayer at the normal spraying angle.

NB. Actual required flow rates can be calculated using the formula in Appendix 1.



SPRAYER PARTS LISTING

ITEM	PARTS NO.	DESCRIPTION
	STIC-03	Attila Cda C/w Batt Conver. Kit
1 1	STIC-031-10000	Battery Case
2	STIC-031-10001	Hose
3	STIC-031-10002	1-0-2 Switch
4	STIC-031-10003	Battery Housing
5	STIC-031-10004	Battery Housing Cover N
6	STIC-031-10035	Tank Cock
7	STIC-031-10008	Battery Housing Ring Nut
8	STIC-031-10009	Brass Screw 5ma x 30te
9	STIC-031-10011	Drawtube Connection
10	STIC-031-10012	Octagonal Cap
11	STIC-031-10013	Drawtube RIng Nut
12	STIC-031-10014	Drawtube
13	STIC-031-10015	Octagonal Cap To Stick
14	STIC-031-10016	Flange
15	STIC-031-10017	Brass Spacer O 5
16	STIC-031-10018	Galvanized Wing Nut O 5
17	STIC-031-10019	Stainless Steel Spring
18	STIC-031-10020	Float Dv
19	STIC-031-10023	Nozzle N. 3
20	STIC-031-10024	Electric Motor N And Support
21	STIC-031-10025	Motor Washer
22	STIC-031-10026	Nozze Flange N
23	STIC-031-10027	Atomizing Disk N
24	STIC-031-10028	Atomizing Disk Protection
25	STIC-031-10039	Helically Wound Wire With Faston
26	STIC-031-10047	Neck Strap (th)
TANK (NEW MO	ODEL)	
27	STMC-021-10054	Nylon 80 Mesh Strainer
28	STTK-011-10008	Filling Cap Complete
29	STMC-021-10041	Spare Cup Cover
30	STMC-021-10042	Spare Cup
31	STMC-021-10043	10 Liter Tank
32	STTK-012-10016	Battery Bottom Cover
33	STMC-021-10044	Battery Cover Bottom Screw
34	STTK-012-10006	Stand Guard
35	STTK-012-10019	Outlet Washer
36	STMC-021-10045	Outlet Valve
37	STMC-021-10046	Outlet Valve Nut
38	STTK-011-10003	Straps Stopper
39	STTK-011-10002	Shoulder Strap
BATTERY CONV	ERSION KIT	
40		Switch C/W Switch Cover
41	STMC-021-10050	6V 3aH Lead Sealed Battery
42	STMC-021-10051A (NEW)	· · · · · · · · · · · · · · · · · · ·
43		Wire Harness From Battery (3-Pole Connector)
44		Electric Wire Black/Red (3-Pole Connector)
45	STMC-021-100057	PVC Tube

CDA PERIODIC INSPECTION CHECK LIST

ITEM	PARTS NO	DESCRIPTION	4 MTH	6 MTH	8 MTH	12 MTH
	STIC AND ARROWS					
1	STIC-031-10002	I - 0 - 2 Switch			0	
2	STIC-031-10020	Float DV				0
3	STIC-031-10023	Nozzle n. 3			0	
4	STIC-031-10024	Electic motor N and support	0		0	0
5	STIC-031-10025	Motor washer	0		0	0
6	STIC-031-10027	Atomizing disk N	0		0	0
7	STIC-031-10039	Helically wound wire with faston				0
8	STIC-031-10047	Neck strap (TH)				0
9	STIC-031-10040	Wire harness battery to switch (Apex)				0
10	STTK-011-10002	Shoulder strap				0
11	STTK-021-10057	PVC Tube			0	
12	STTK-012-10016	Battery bottom cover				0
13	STMC-021-10044	Battery cover bottom screw				0
14	STMC-021-10050	6V 3AH Lead sealed battery	0		0	0
15	STMC-021-10002A (NEW)	Electric Wire Black/Red (3-Pole Conn.)				0
16	STMC-021-10048A (NEW)	Switch C/W Switch Cover		0		
17	STMC-021-10025A (NEW)	Wire Harness Battery (3-Pole Conn.)		0		

^{0 -} Complusory change for continuous use at indicated intervals. The rest change when necessary.

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